

FIG. 1

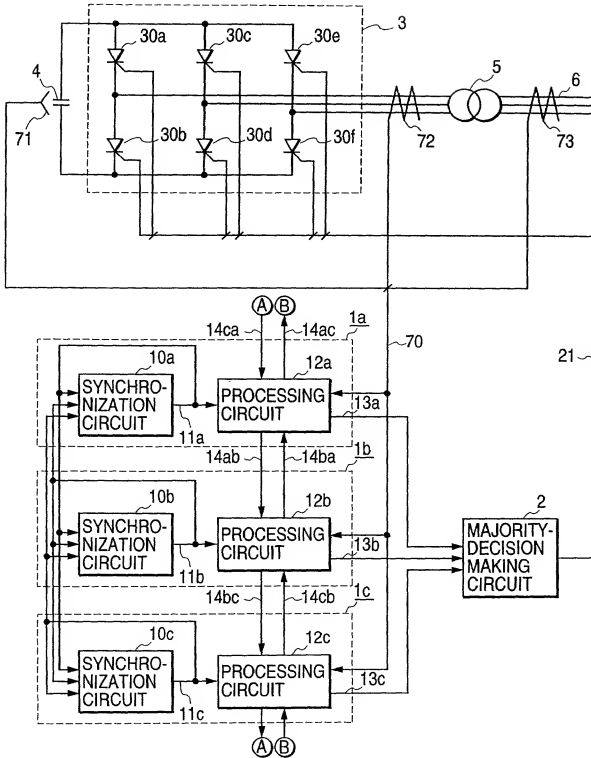


FIG. 2

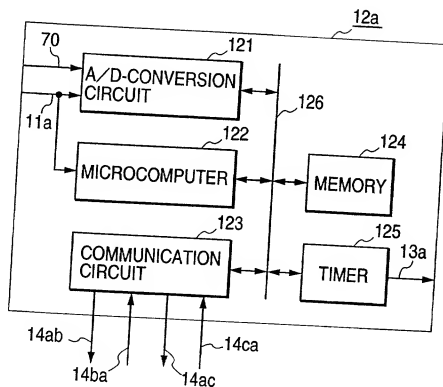


FIG. 4

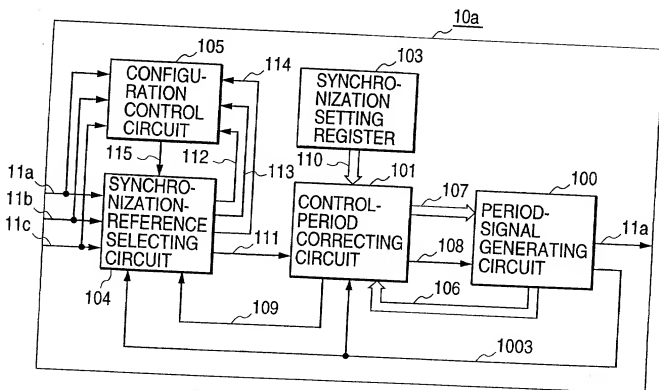


FIG. 3(a)

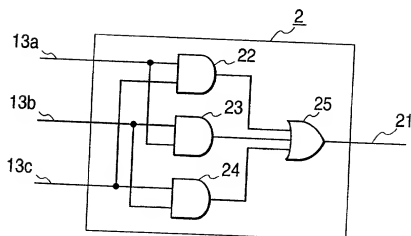


FIG. 3(b)

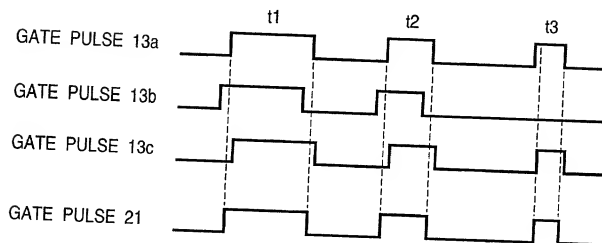


FIG. 5

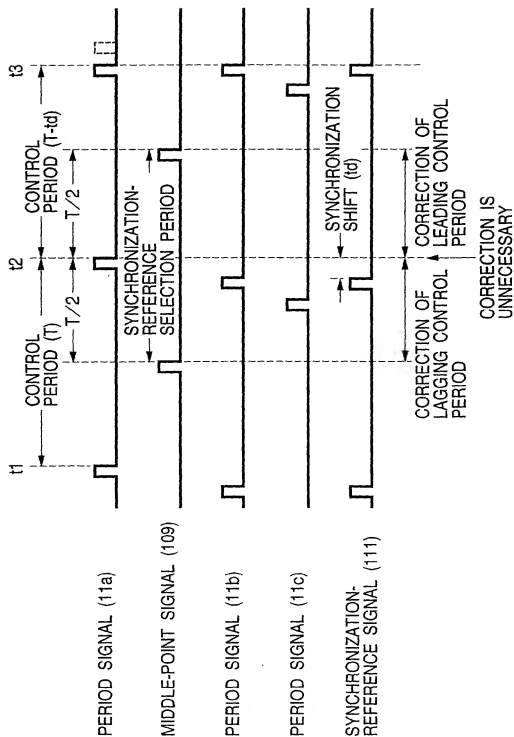


FIG. 6

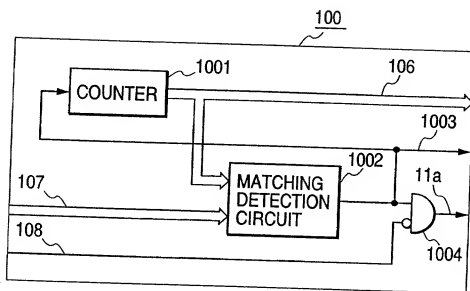


FIG. 7

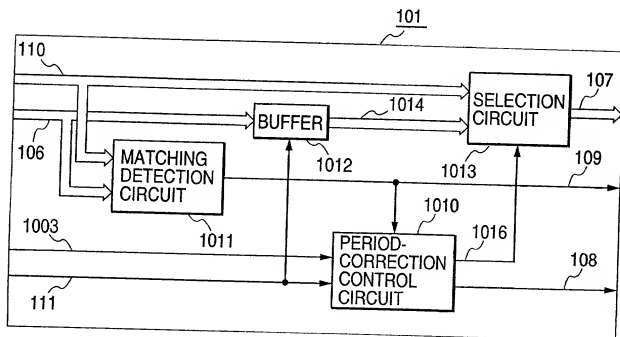


FIG. 8

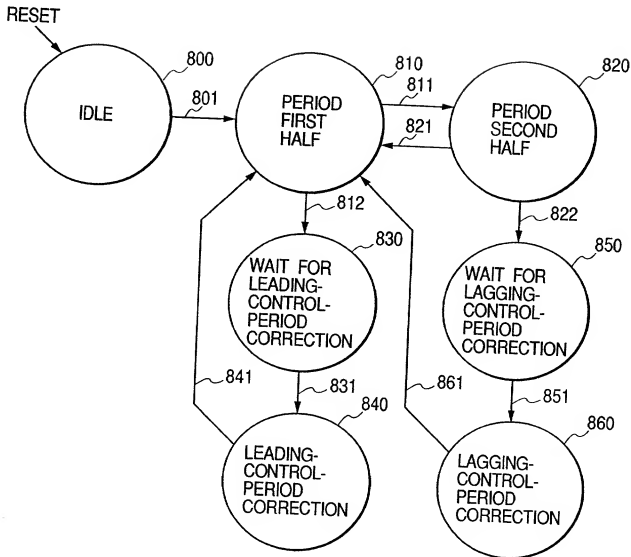


FIG. 9

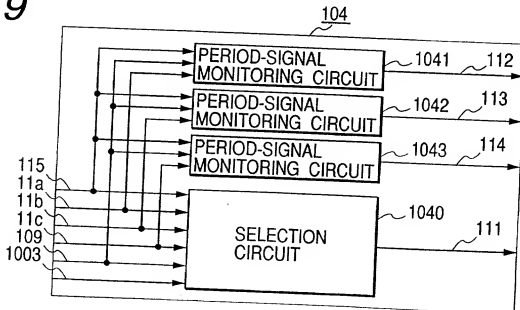


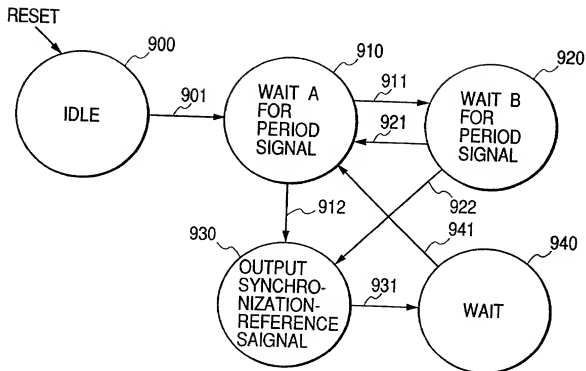
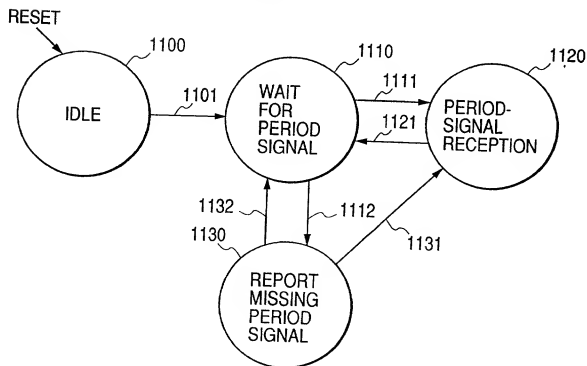
FIG. 10**FIG. 11**

FIG. 12

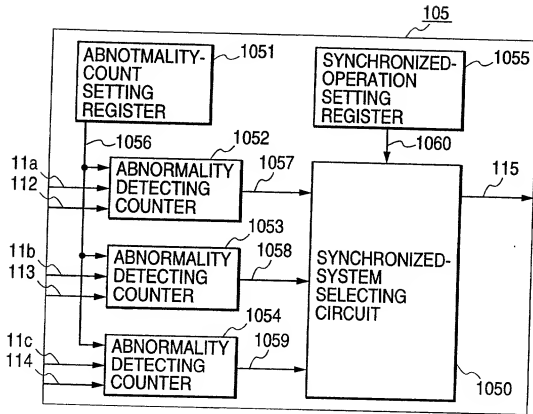


FIG. 13

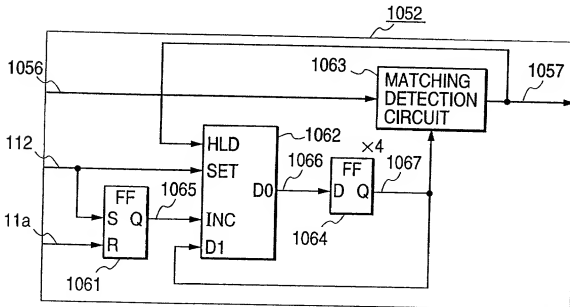


FIG. 14

| SET | INC | HLD | DO |
|-----|-----|-----|------|
| 0 | 0 | 0 | DI |
| 0 | 0 | 1 | DI |
| 0 | 1 | 0 | DI |
| 0 | 1 | 1 | DI |
| 1 | 0 | 0 | 1 |
| 1 | 0 | 1 | DI |
| 1 | 1 | 0 | DI+1 |
| 1 | 1 | 1 | DI |

FIG. 15

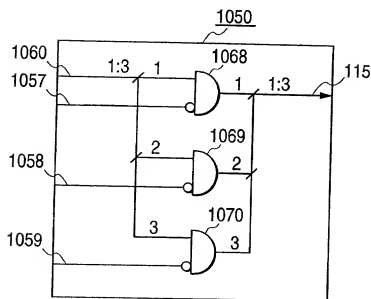


FIG. 16

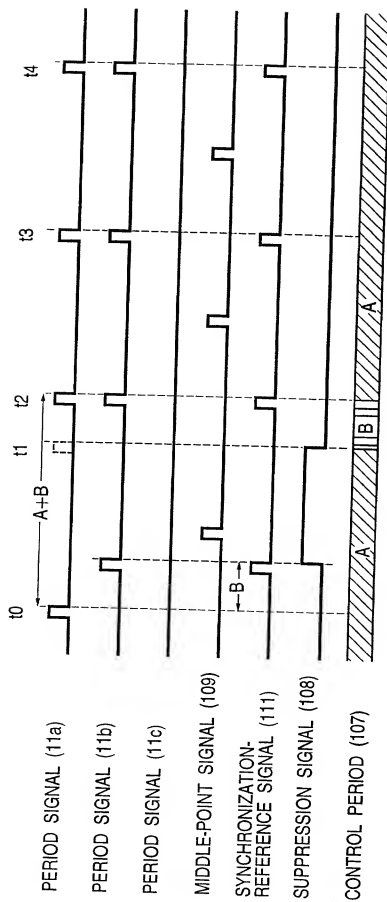


FIG. 17

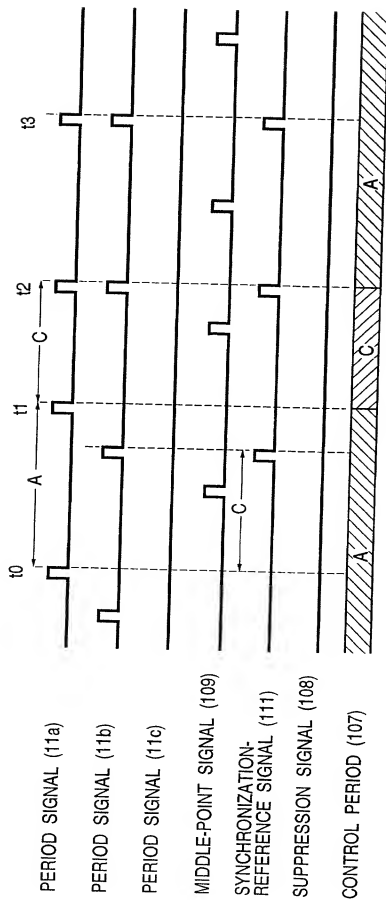


FIG. 18

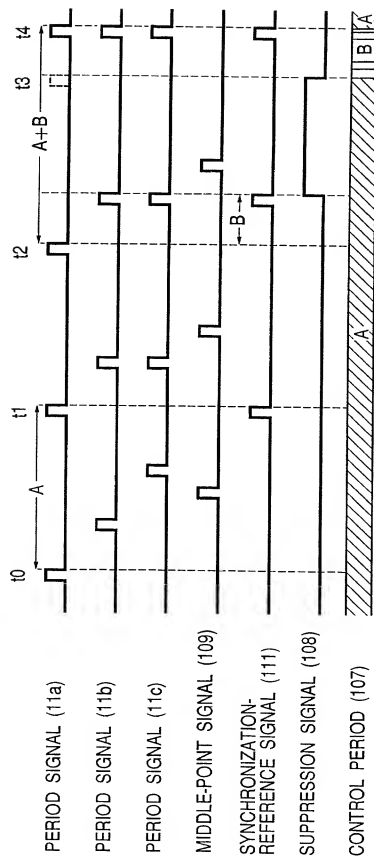


FIG. 19

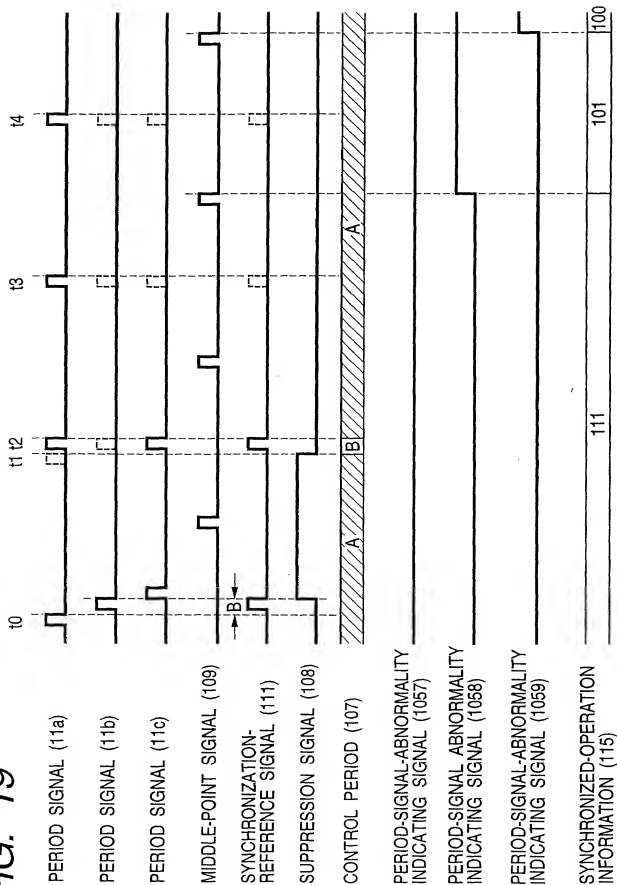


FIG. 20

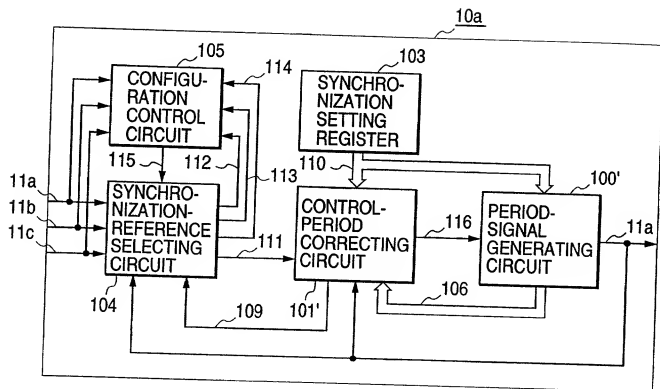


FIG. 21

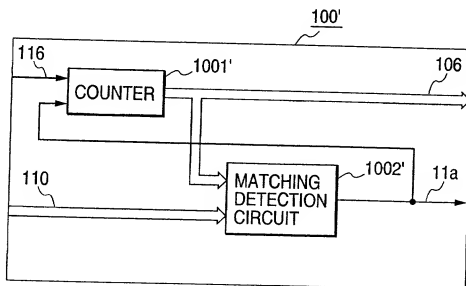


FIG. 22

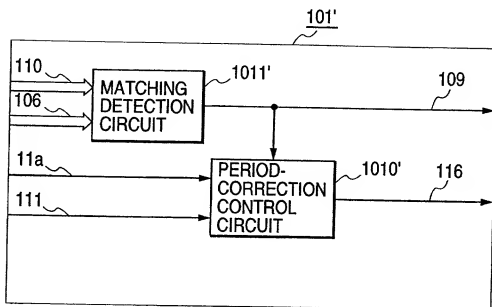


FIG. 23

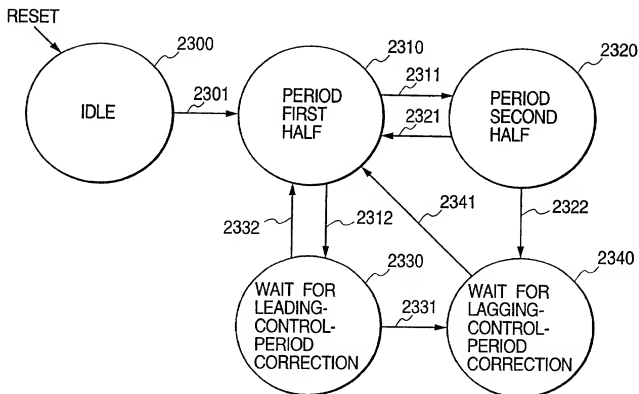


FIG. 24

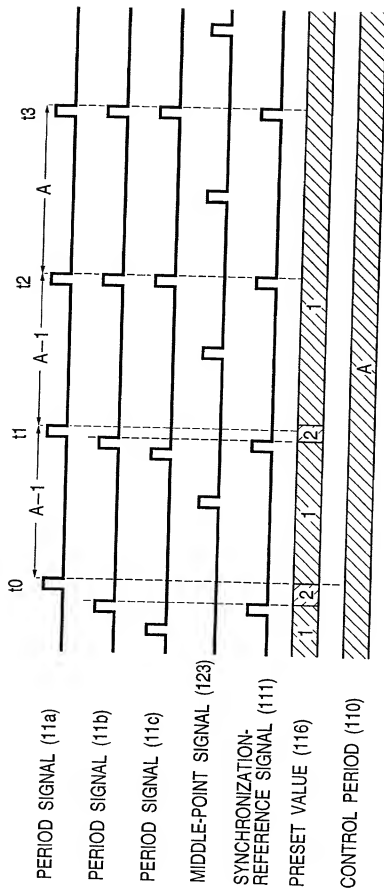


FIG. 26

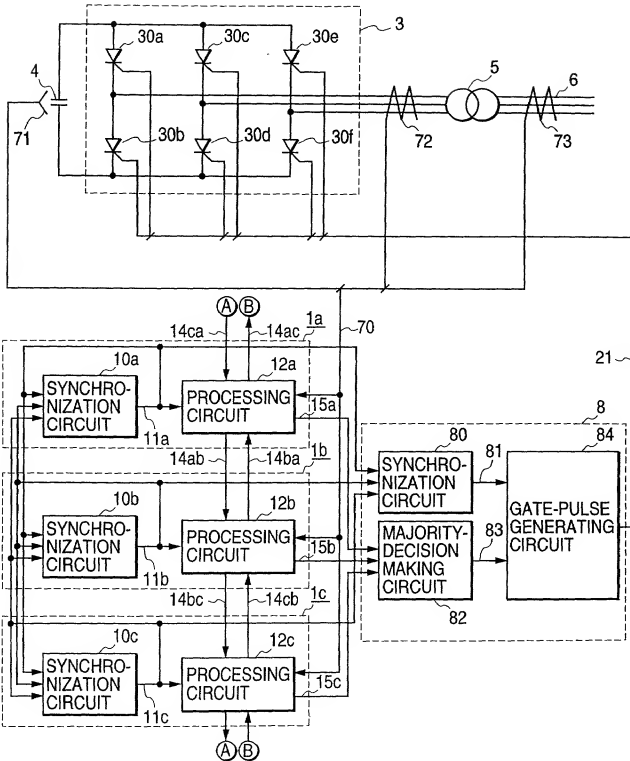


FIG. 28

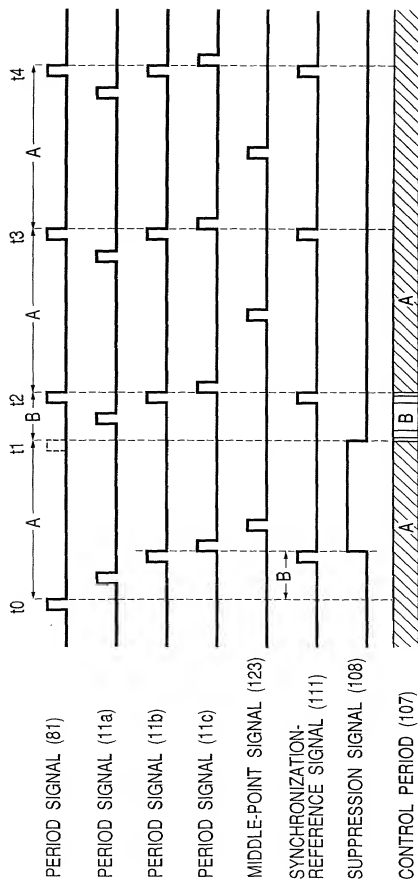


FIG. 29

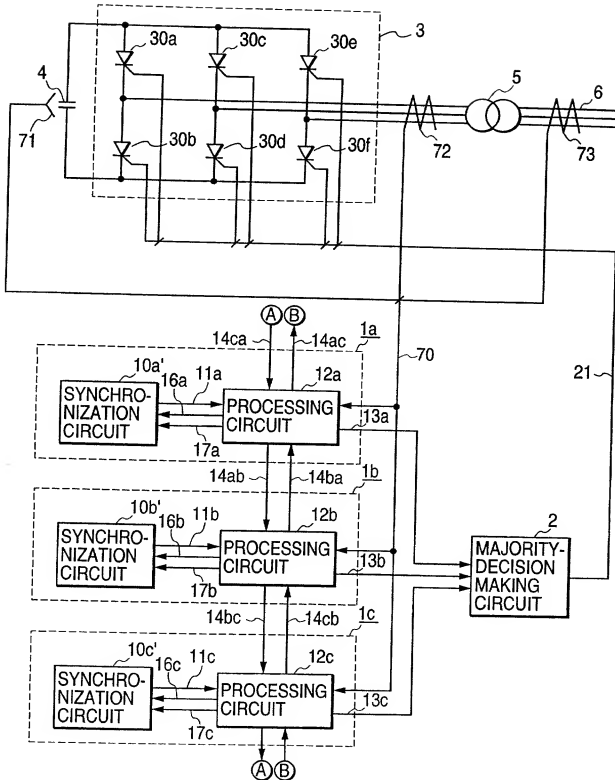


FIG. 30

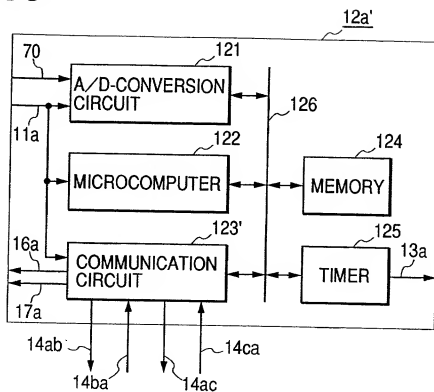


FIG. 31

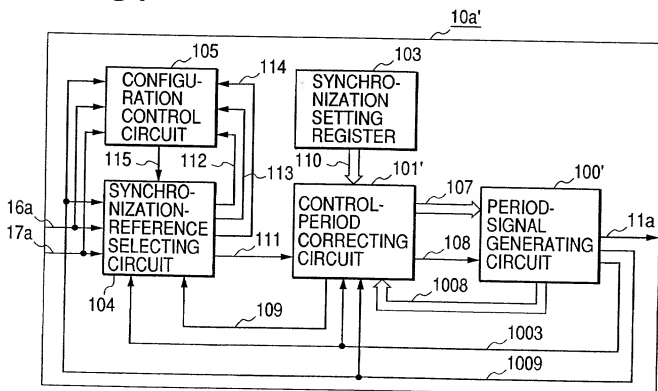


FIG. 32

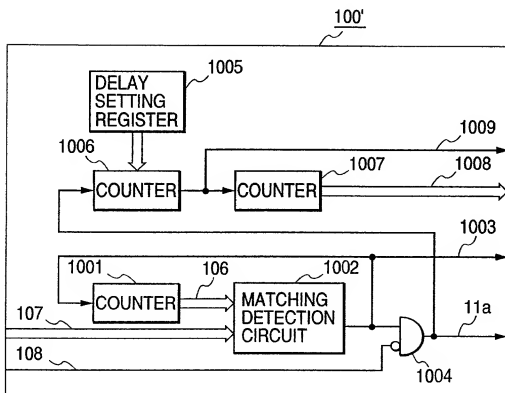


FIG. 33

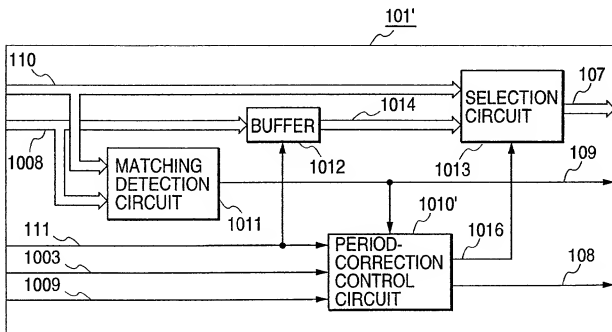


FIG. 34

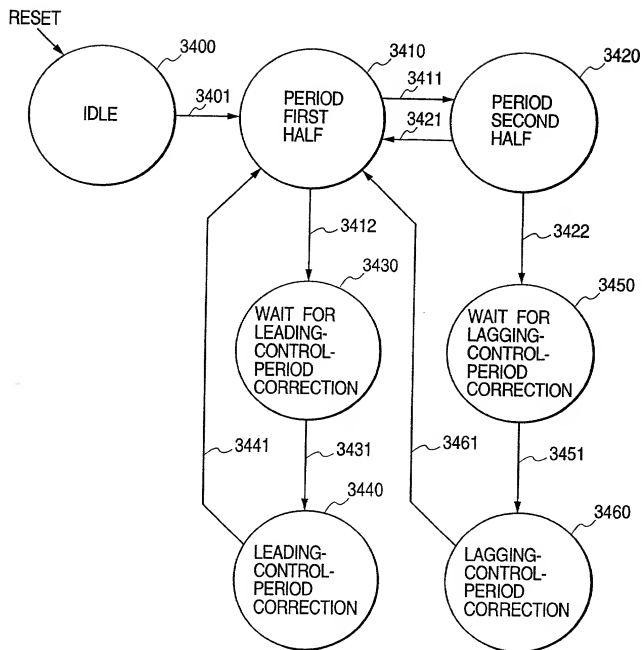


FIG. 35

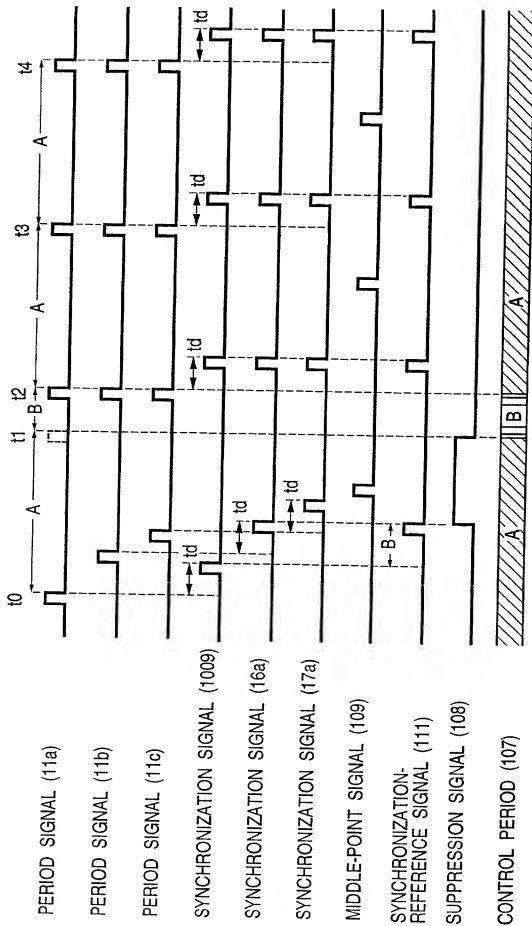


FIG. 36

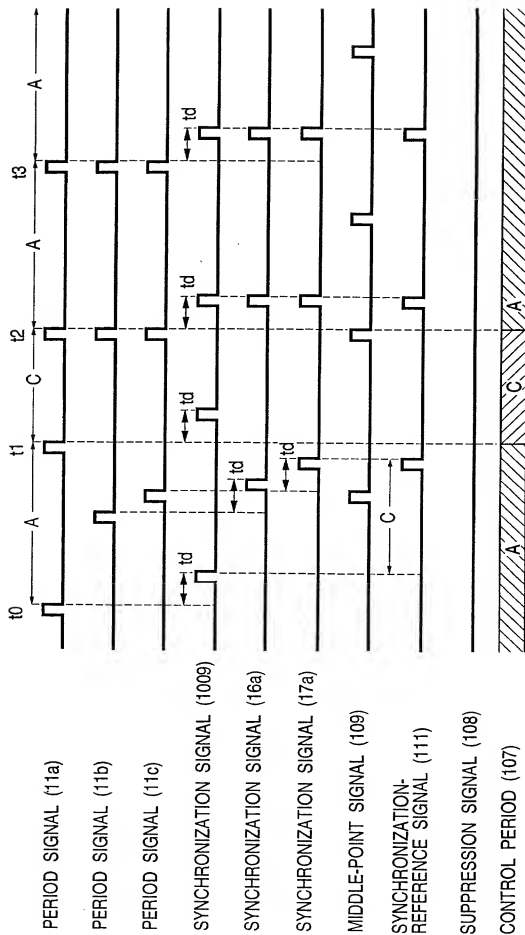


FIG. 37

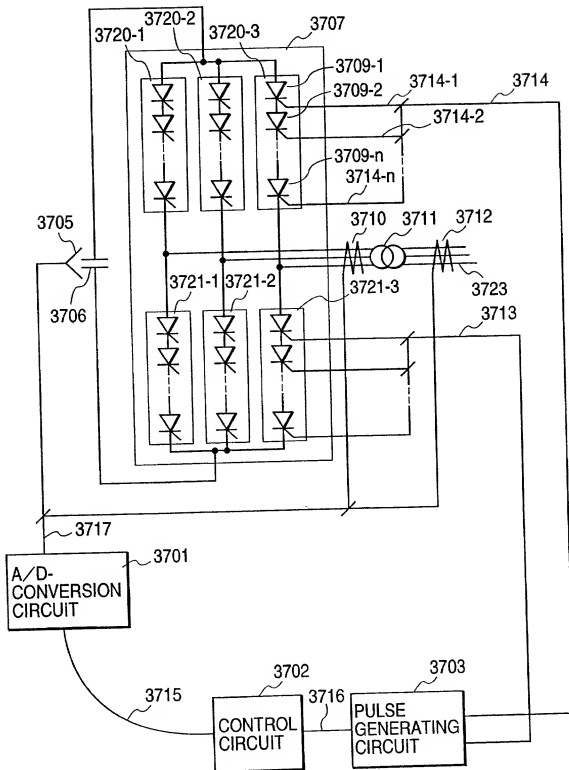


FIG. 38

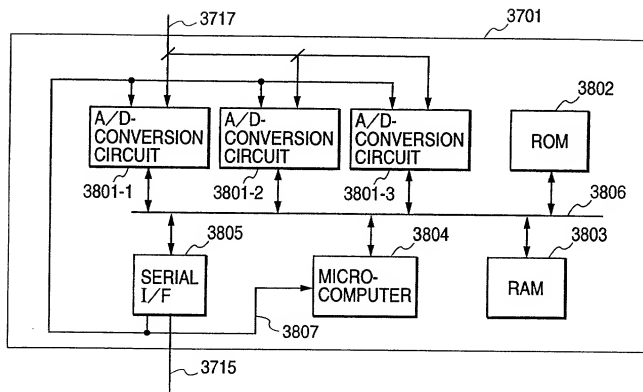


FIG. 39

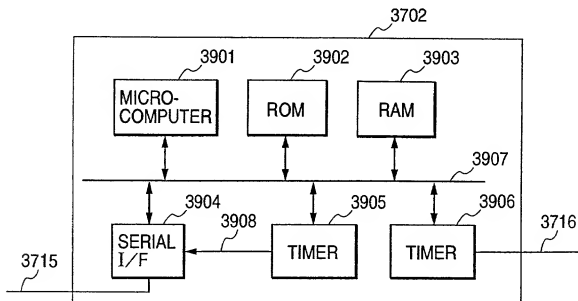


FIG. 40(a)

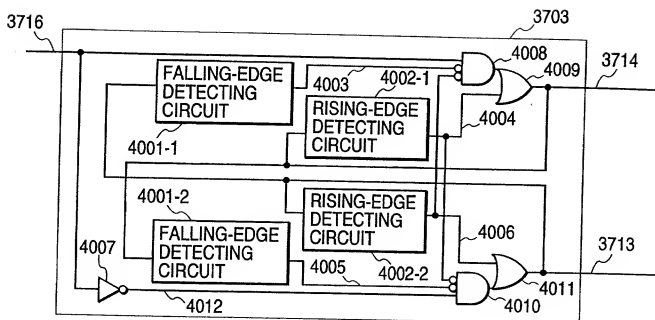


FIG. 40(b)

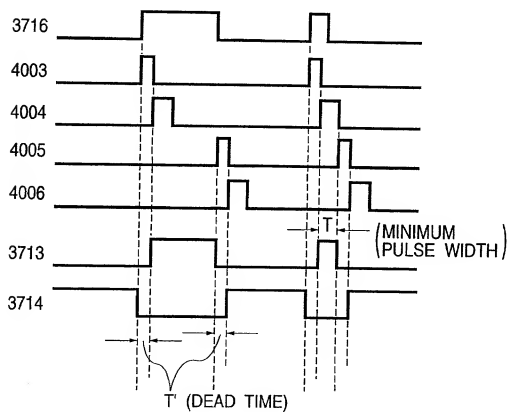


FIG. 41(a)

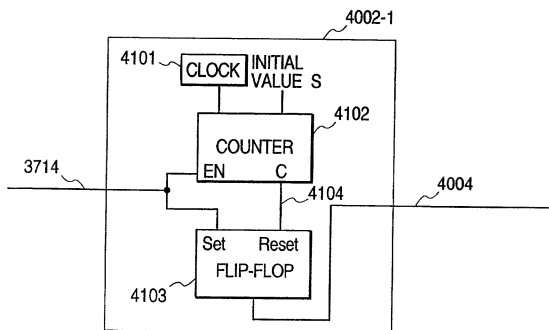


FIG. 41(b)

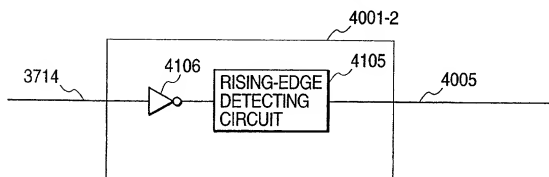


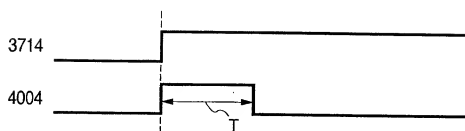
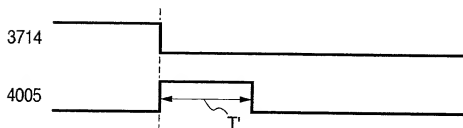
FIG. 42(a)*FIG. 42(b)*

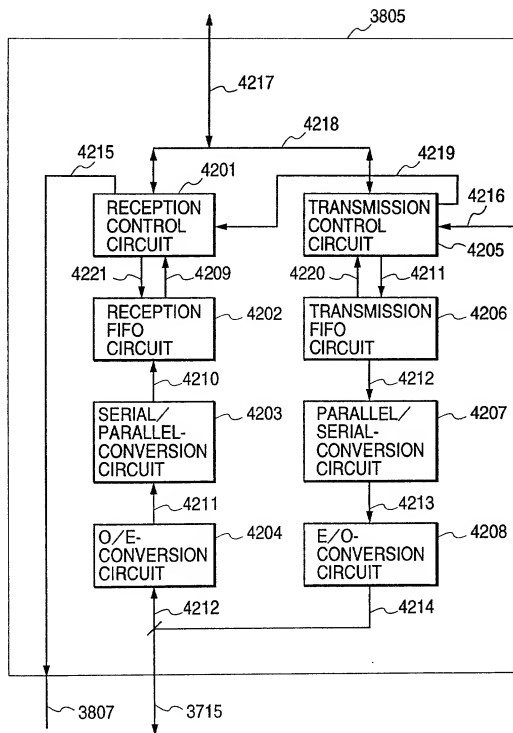
FIG. 43

FIG. 44

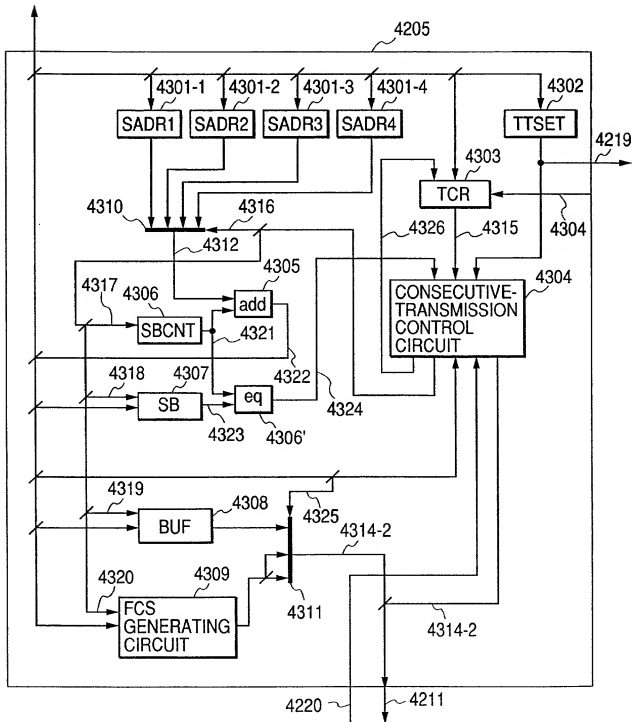


FIG. 45(a)

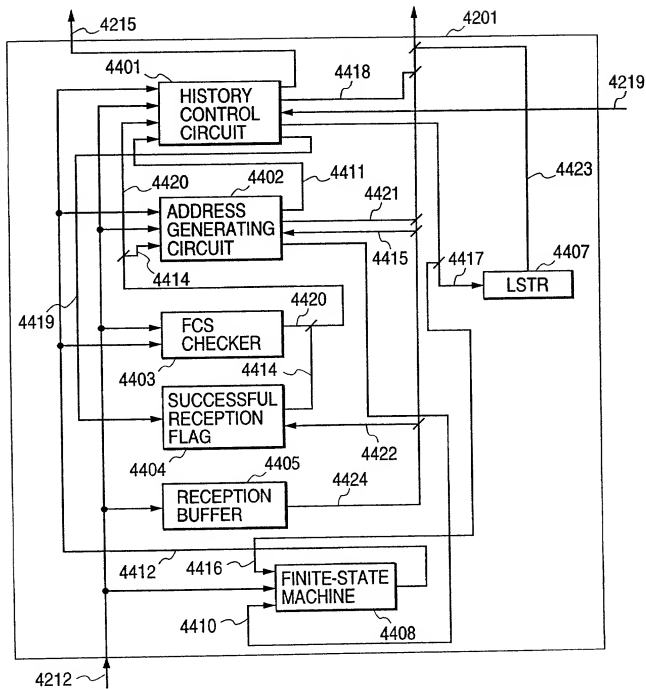


FIG. 45(b)

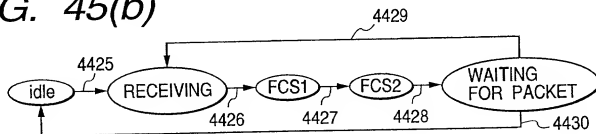


FIG. 46(a)

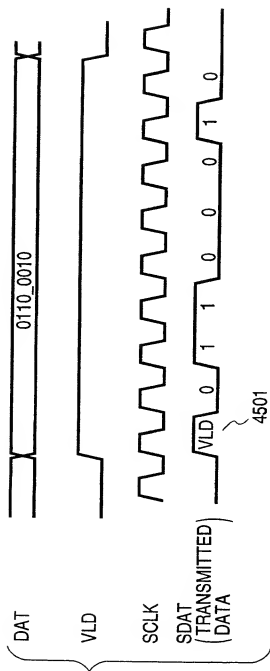


FIG. 46(b)

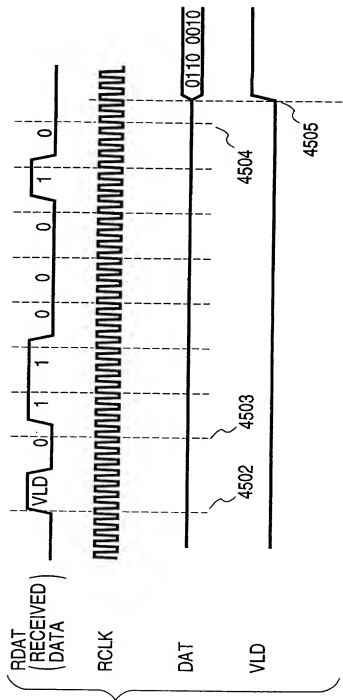


FIG. 47(a)

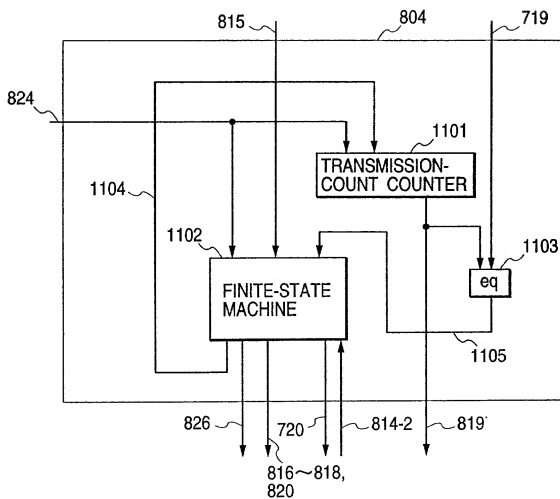


FIG. 47(a)

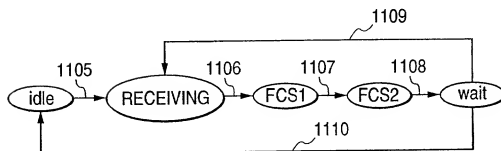


FIG. 48

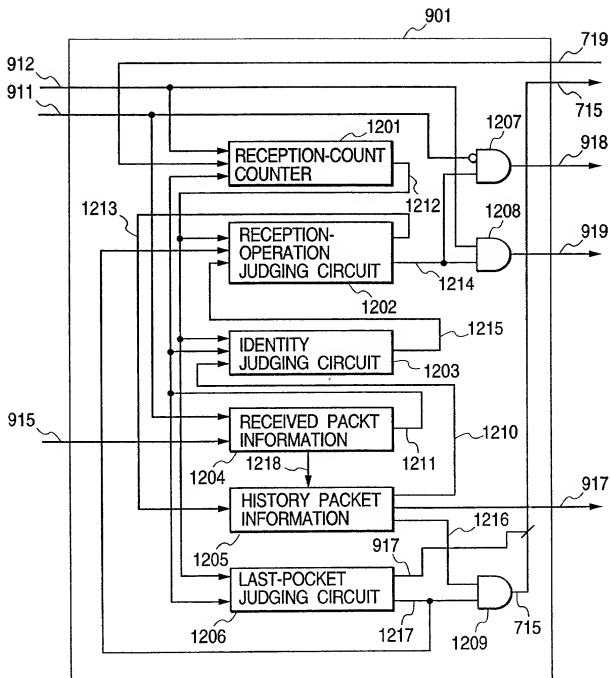


FIG. 49

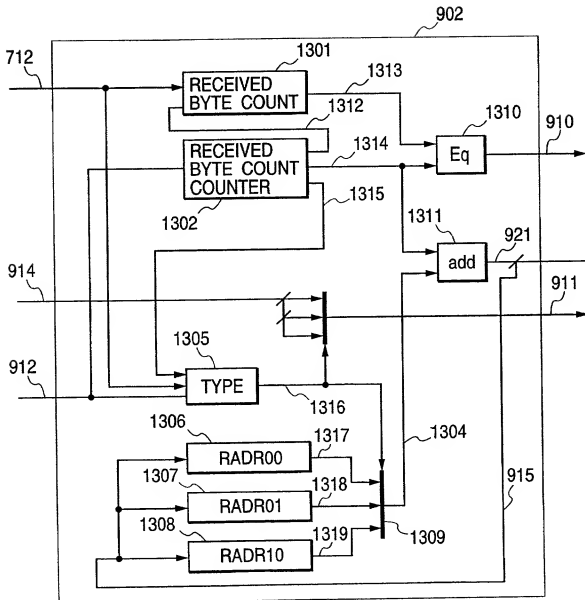


FIG. 50(a)

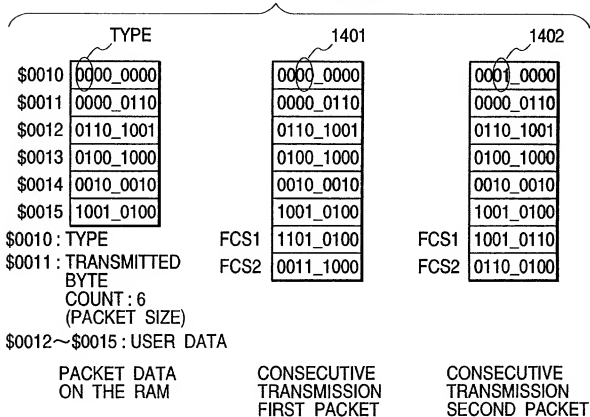


FIG. 50(b)

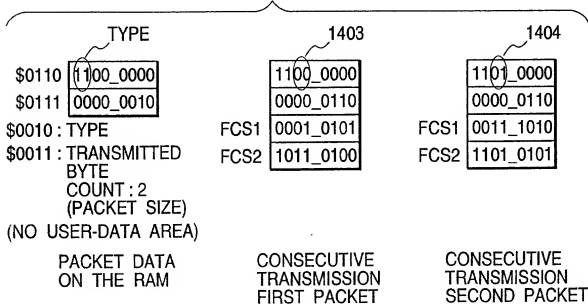


FIG. 51(a)

RECEPTION-OPERATION JUDGING CIRCUIT 4702

REQUEST FOR A MEMORY WRITE :

NO SUCCESSFUL HISTORY PACKET OF THE SAME TYPE IS RECEIVED IN THE PAST DURING RECEPTION OF DATA PACKETS.

REQUEST TO SET THE SUCCESSFUL-RECEPTION FLAG 4404 :

NO ERROR RECORD EXISTS IN THE RECEIVED-PACKET-INFORMATION REGISTER 4704 AND (THE RECEPTION COUNT IN THE RECEPTION-COUNT COUNTER 4701=0 OR A RECORD OF AN ERROR EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 OR THE IDENTITY JUDGING CIRCUIT 4703 JUDGES A PACKET CURRENTLY BEING RECEIVED TO BE A PACKET OF A DIFFERENT TYPE).

ERROR-LOG REQUEST :

INFORMATION INDICATING DETECTION OF AN ERROR EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 AND A PACKET CURRENTLY BEING RECEIVED IS THE LAST ONE.

INTERRUPT SIGNAL TO THE SIGNAL LINE 4415 :

THE TYPE OF A PACKET STORED IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 IS INDICATED BY A CODE OF '11' AND NO RECORD OF AN ERROR EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 AND A PACKET CURRENTLY BEING RECEIVED IS THE LAST ONE.

FIG. 51(b)

IDENTITY JUDGING CIRCUIT 4703 :

NO ERROR EXISTS IN A PACKET CURRENTLY BEING RECEIVED AND THE RECEPTION COUNT IN THE RECEPTION-COUNT COUNTER 4701 IS NOT 0 AND (NO ERROR HISTORY EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 AND (THE PACKET TYPE RECORDED IN THE RECEIVED-PACKET-INFORMATION REGISTER 4704)=(THE PACKET TYPE RECORDED IN THE HISTORY-PACKET-INFORMATION REGISTER 4705) AND THE RECEPTION COUNT IN THE RECEPTION-COUNT COUNTER 4701<=THE SEQUENCE NUMBER n OF THE REPEATED TRANSMISSION OF THE PACKET CURRENTLY BEING RECEIVED) OR (AN ERROR HISTORY EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 AND THE RECEPTION COUNT IN THE RECEPTION-COUNT COUNTER 4701<=THE SEQUENCE NUMBER n OF THE REPEATED TRANSMISSION OF THE PACKET CURRENTLY BEING RECEIVED)

FIG. 51(c)

RECEIVED-PACKET-INFORMATION REGISTER 4704 HAVING A WIDTH OF 6 BITS:

PACKET TYPE: 2 BITS

THE SEQUENCE NUMBER n OF THE REPEATED TRANSMISSION: 2 BITS

ERROR INFORMATION-2 BITS:

ERROR TYPE: 1 BIT INDICATING A CRC ERROR OR A RECEIVED-DATA
OVERRUN ERROR

ERROR DETECTION: 1 BIT INDICATING WHETHER AN ERROR IS
DETECTED OR NOT

FIG. 51(d)

HISTORY-PACKET-INFORMATION REGISTER 4705 HAVING A WIDTH OF 4 BITS:

PACKET TYPE: 2 BITS

ERROR INFORMATION-2 BITS:

ERROR TYPE: 1 BIT INDICATING A CRC ERROR OR A RECEIVED-DATA
OVERRUN ERROR

ERROR DETECTION: 1 BIT INDICATING WHETHER AN ERROR IS
DETECTED OR NOT

FIG. 51(e)

LAST-PACKET JUDGING CIRCUIT 4706:

(NO ERROR IS DETECTED IN A PACKET CURRENTLY BEING RECEIVED AND THE CONTENTS OF THE REPEATED-TRANSMISSION-COUNT SETTING REGISTER 4302) \leq THE SEQUENCE NUMBER n OF THE REPEATED TRANSMISSION OF THE PACKET CURRENTLY BEING RECEIVED) AND (AN ERROR IS DETECTED IN A PACKET CURRENTLY BEING RECEIVED AND THE CONTENTS OF THE REPEATED-TRANSMISSION-COUNT SETTING REGISTER 4302 \leq THE CONTENTS OF THE RECEPTION-COUNTER 4701) OR (A SUCCESSFUL-RECEPTION HISTORY EXISTS IN THE HISTORY-PACKET-INFORMATION REGISTER 4705 AND THE PACKET TYPE STORED IN THE RECEIVED-PACKET-INFORMATION REGISTER 4704 IS DIFFERENT FROM THE PACKET TYPE STORED IN THE HISTORY-PACKET-INFORMATION REGISTER 4705) OR A TIME-OUT EVENT OCCURS DURING A PACKET WAITING STATE OF THE FINITE STATE MACHINE 4408.

FIG. 52

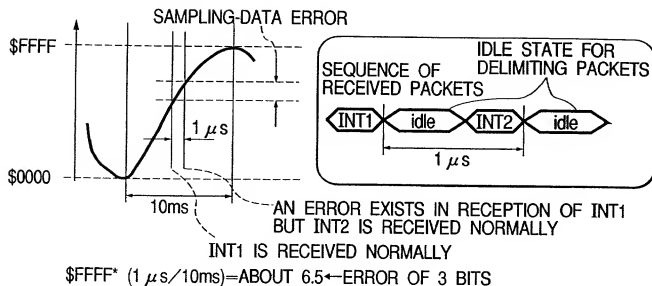


FIG. 54

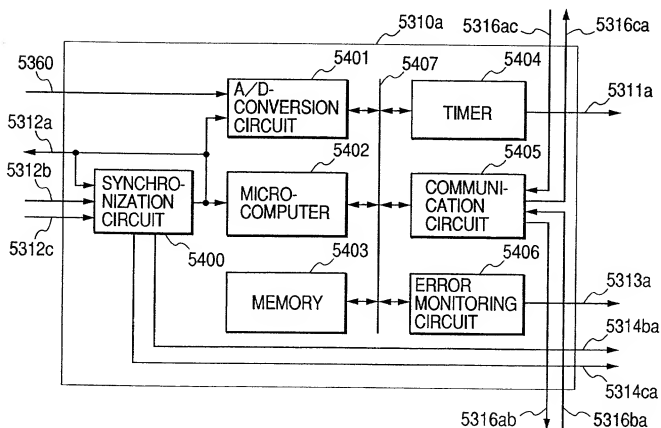


FIG. 53

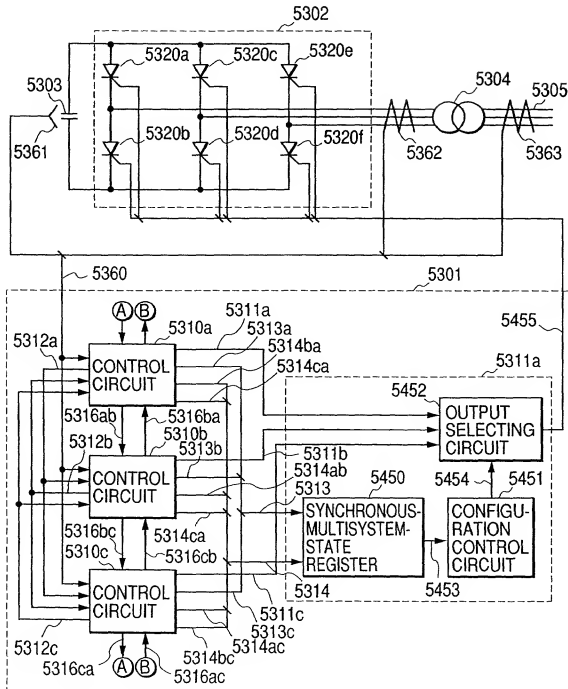


FIG. 55(a)

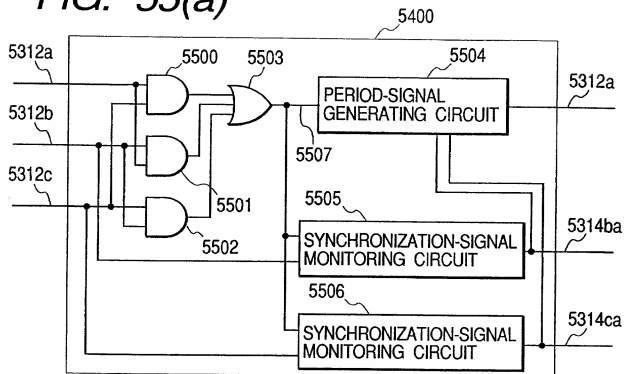


FIG. 56

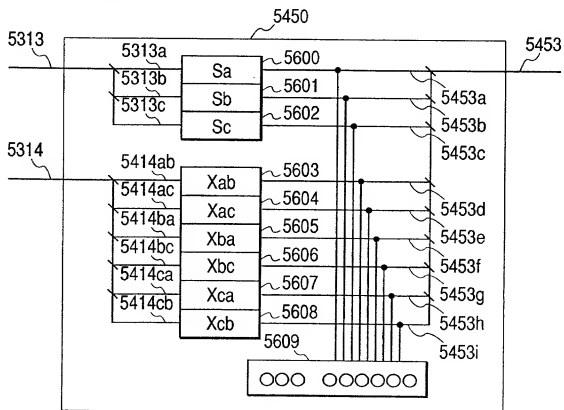


FIG. 55(b)

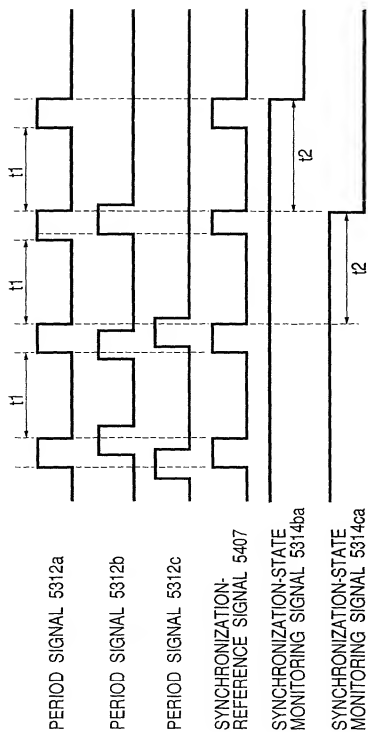


FIG. 57

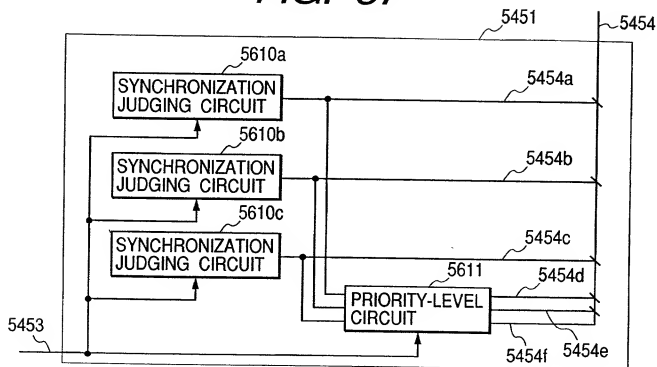


FIG. 59

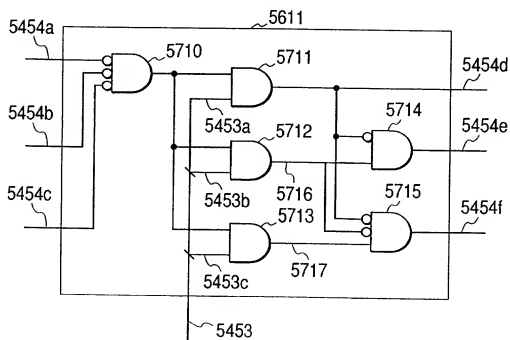


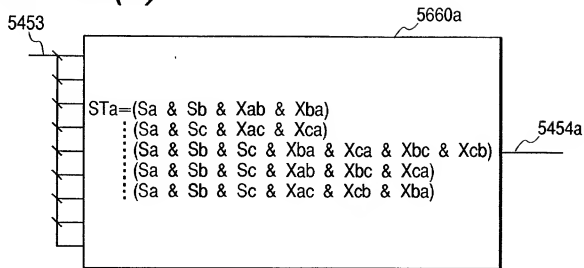
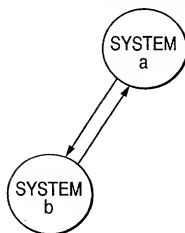
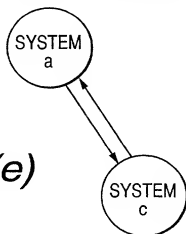
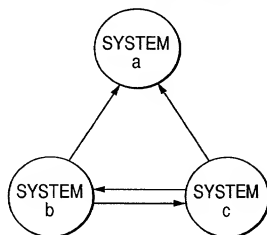
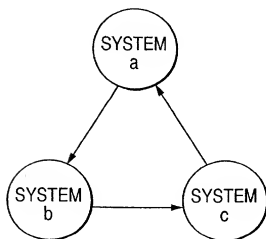
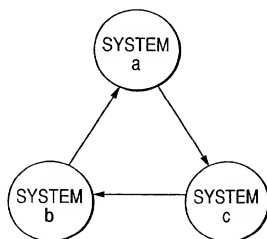
FIG. 58(a)**FIG. 58(b)****FIG. 58(c)****FIG. 58(d)****FIG. 58(e)****FIG. 58(f)**

FIG. 60

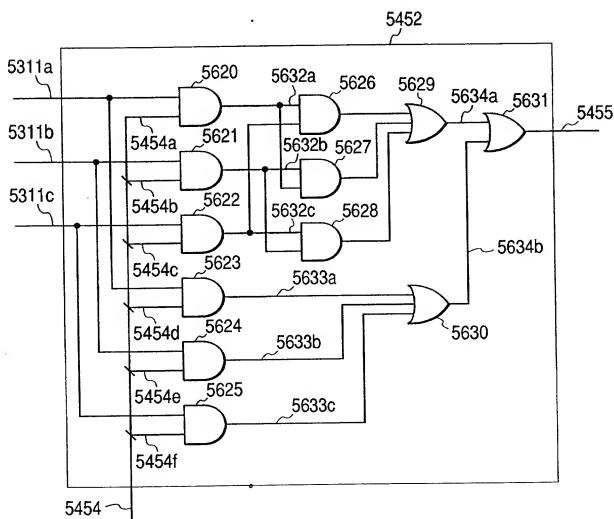


FIG. 61

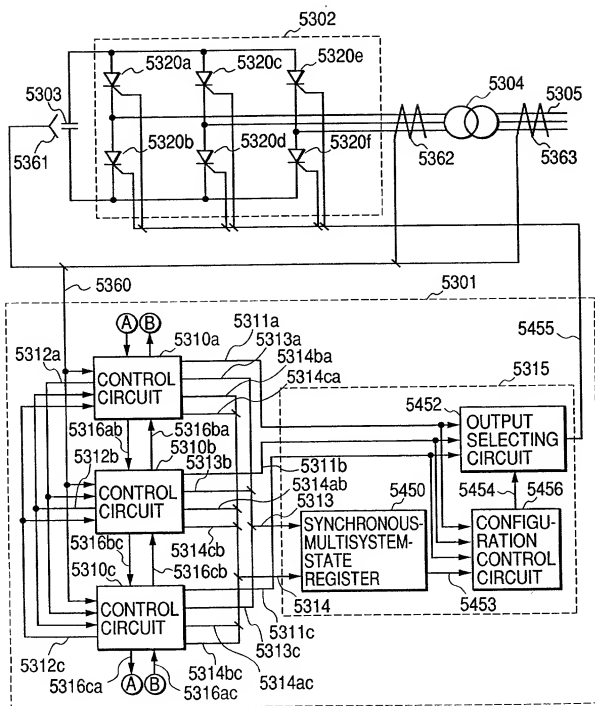


FIG. 62

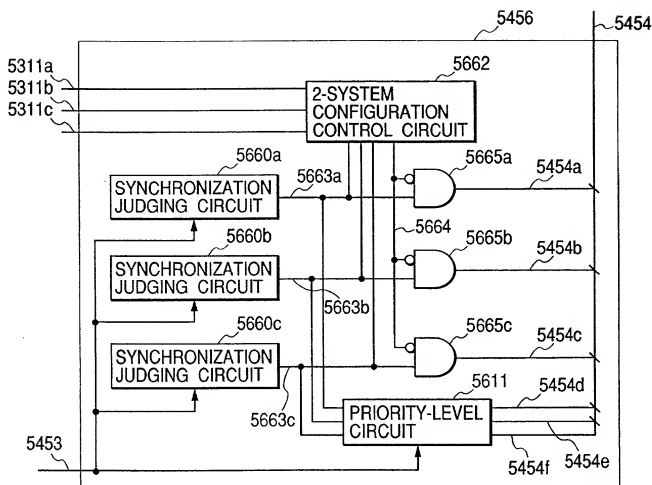


FIG. 63(a)

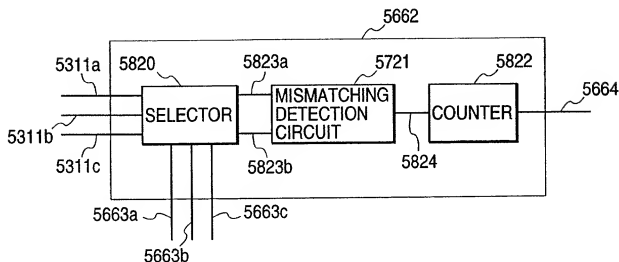


FIG. 63(b)

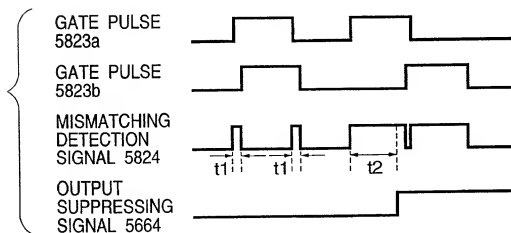


FIG. 64(a)

SELECTOR 5820

| 5663a | 5663b | 5663c | 5823a | 5823b |
|-------|-------|-------|-------|-------|
| 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 |
| 0 | 1 | 1 | 11b | 11c |
| 1 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 11a | 11c |
| 1 | 1 | 0 | 11a | 11b |
| 1 | 1 | 1 | 0 | 0 |

FIG. 64(b)

MISMATCHING DETECTION CIRCUIT 5821

| 5823a | 5823b | 5824 |
|-------|-------|------|
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

FIG. 65

